

## TWO NEW SPECIES OF THE GENUS *ULOMA* DEJEAN, 1821 FROM CHINA (COLEOPTERA, TENEBRIONIDAE, ULOMINI)

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**Abstract** In this paper two new species of the genus *Uloa* Dejean, *U. compressa* sp. nov. and *U. quadratithorax* sp. nov. are described from China. The type specimens are preserved in the Museum of Hebei University.

**Key words** Coleoptera, Tenebrionidae, *Uloa*, new species, China.

The genus *Uloa* is an important group of arboreal darkling beetles, belonging to the family Tenebrionidae. Species of the genus *Uloa* are mainly distributed in Oriental, Australian and Neotropical Regions. Up to now, 32 species of *Uloa* have been reported to occur in China, and they mainly occur in warm and moist areas. In this study, we report the discovery of two new species from China. All specimens are deposited in the Museum of Hebei University.

### 1 *Uloa compressa* sp. nov. (Figs. 1–8, 17)

Male. Body longish ellipse, weakly shining; darkish red, antennae, mouthparts and legs slightly lighter in color. Head transverse, distinctly grooved in Y-shape; labrum transversely ellipse, sparsely hairy at front border; clypeus emarginated in anterior border, elevated 2 small ridges, and large punctate; frons and genae both elevated, front concave in middle with large punctures; anterior genae with sparse and fine punctures, arcuately extended to sides, posterior genae reduced; eyes transverse, with 4–5 facets at narrowest point in lateral view; mentum cordate, depressed in middle with fine punctures but transverse wrinkles, linear at posterior sides, and with short fine hair in all sides; ligula water caltrop like, depressed and coarse in middle with sparse long hair; maxillary palpus with subknife shaped terminal segment. Antennae reaching basal half of pronotum; 3<sup>rd</sup> indistinctly slender; 5<sup>th</sup> to 10<sup>th</sup> segment gradually widened; 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> prominent to inner border; 10<sup>th</sup> rectangular; terminal segment transverse oval; relative length (width) of each segment from 2<sup>nd</sup> to 11<sup>th</sup>: 7.0 (9.0), 10.0 (9.0), 9.0 (11.0), 9.0 (16.0), 7.0 (15.0), 9.0 (22.0), 9.0 (19.0), 8.0 (22.0), 9.0 (20.0), 11.0 (18.0). Pronotum transverse, about 1.34 times as broad as long, widest at basal half, with sparse punctures in middle but dense at sides; front border emarginate with narrow margin only at both apices; sides arcuate, broadly margined, distinctly narrowed forward

and slightly to rear from the widest point; basal border feebly bisinuate; front angles near rectangular, hind angles obtuse; antero median excavation subcircular and deep, covered with large punctures. Scutellum subpentagonal, sparsely and finely punctate. Elytra distinctly punctate-striate, intervals flat, sparsely and finely punctate with several transverse wrinkles, lateral margins visible only at humeri in dorsal view. Propleuron longitudinally wrinkled with large punctures. Posternum coarsely and largely punctate, with several short hair in middle, posternal process with fine punctures, slightly descended at apex. Protibia relatively slender, suddenly widened to apex, inner border feebly curved, narrow at base, with a row of hair; outer border bearing 8, 9 or 10 sharp teeth, and with short hair between teeth; dorsal surface with coarse and irregular punctures; ventral surface with a row of 4 or 5 small teeth. Mesotibia finely dentate at outer border. Metatibia smooth at outer border, relative length of 1<sup>st</sup> to 4<sup>th</sup> segment of metatarsus from base to apex: 39.0, 9.0, 8.0, 28.0, basal segment distinctly longer than terminal segment. Aedeagus linearly truncate at apex in dorsal view, longitudinally grooved in ventral view, and relatively curved in lateral view; parameres relatively narrow but broad at base, gradually converged in middle, then broadened again to apex, and with a semicircular depression at apex.

Female. Unknown.

Body length 12.0 mm, width 5.0 mm.

Holotype ♂, Jingpingliyue, Jingdong (24.42°N, 100.82°E; alt. 1630 m), Yunnan, 16 Nov. 2001, collected by TONG Zheng Qiang. Paratype 1 ♂, Zhangjiajie (29.08°N, 110.29°E), July 1986, no collector.

Diagnosis. The new species can be distinguished from *U. nanshanica* Masumoto et Nisiikawa, 1986 by the following characters: interocular space without transverse elevation; antennae relatively slender, reaching basal half of pronotum; posternum with several short hair

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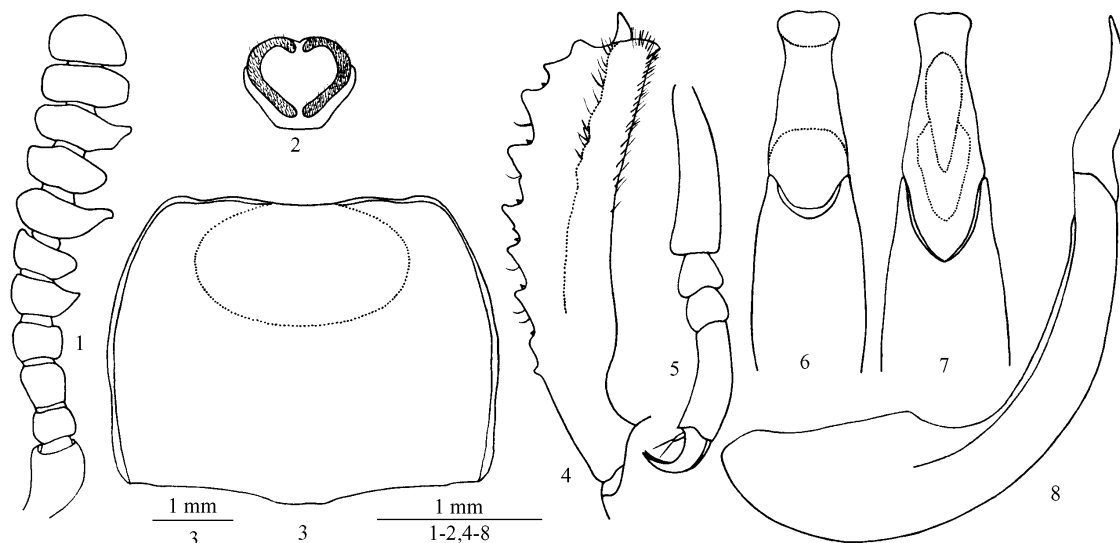
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in middle; intervals of elytra flat; basal segment of metatarsus distinctly longer than terminal segment.

**Etymology.** The specific name is derived from the

Latin word “*compressus*” (compressed), and with combination of the feminine suffix “-a”, which refers to the compressed body.

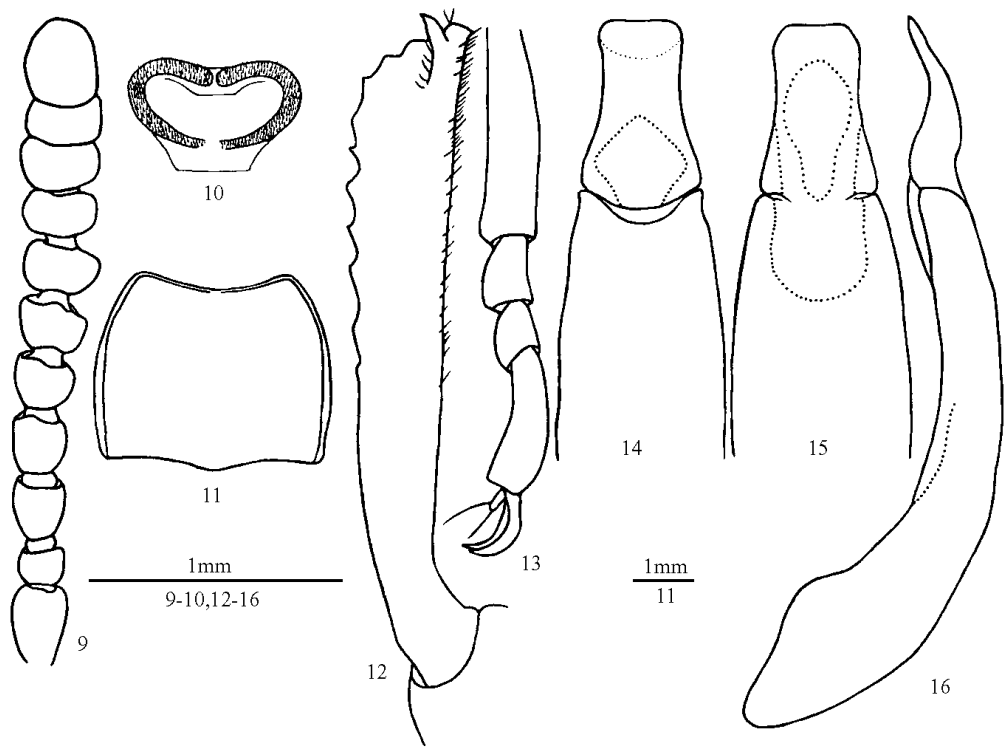


Figs 1-8. *Uloma compressa* sp. nov. 1. Antenna. 2. Mentum. 3. Pronotum. 4. Protibia. 5. Metatarsus. 6. Apical aedeagus in dorsal view. 7. Apical aedeagus in ventral view. 8. Aedeagus in lateral view.

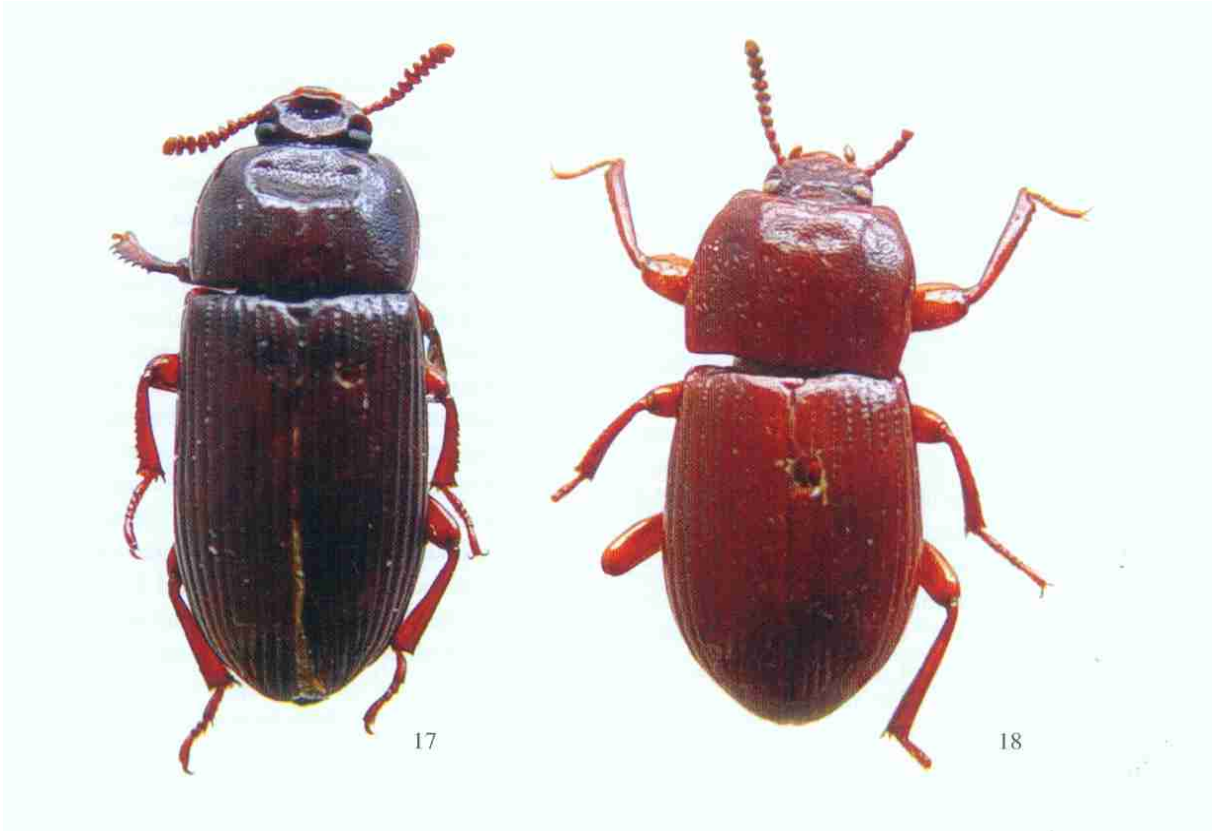
## 2 *Uloma quadratithoraca* sp. nov. (Figs. 9-16, 18)

**Male.** Body median in size, oblong, feebly convex, strongly shining; reddish brown, antennae, mouthparts and legs distinctly red. Head extremely transverse, slightly grooved in Y-shape; labrum near trapeziform, elevated in middle with a narrow margin at front border, sparsely hairy; clypeus near flat, feebly emarginate in anterior border, finely punctate but more largely to posterior border; front-clypeal groove distinct; anterior genae feebly convex with dense and fine punctures, feebly and arcuately extended to sides, posterior genae reduced; eyes a little transverse, with 5-6 facets at narrowest point in lateral view; frons weakly convex between two eyes with sparse punctures; mentum broadly cordate, feebly emarginate at anterior border, slightly dented in middle, linearly truncate at base, and elevated at all sides with a pair of semicircular hair-rings; ligula approximately water caltrop-like, depressed in middle with several short hair; maxillary palpus with slender and subknife-shaped terminal segment. Antennae slender, reaching basal 1/3 of pronotum; 3<sup>rd</sup> slender; 4<sup>th</sup> shorter than 3<sup>rd</sup> but longer than 2<sup>nd</sup>; 5<sup>th</sup> to 10<sup>th</sup> segment gradually widened but not strongly, and prominent to anterior border in dorsum; 9<sup>th</sup> and 10<sup>th</sup> near rectangular; terminal segment very long, suboval, and sharp at apex; relative length (width) of each segment from 2<sup>nd</sup> to 11<sup>th</sup>: 6.0 (8.0), 9.0 (8.0), 10.0 (9.5), 9.5 (10.5), 9.0 (12.0), 8.0 (13.0), 7.5 (13.0), 8.0 (14.0), 7.5 (12.5), 15.0 (12.5). Pronotum slightly convex, quadrate, about 1.25 times as broad as long, widest at basal 2/3; front border deeply emarginate with narrow

margin only interrupted in middle; sides weakly arcuate, narrowly margined, distinctly converged forward and nearly parallel to rear from the widest point; basal border feebly bisinuate; front angles sharply prominent, hind angles near rectangular; pronotum without antero-median excavation; disc relatively densely punctate, the punctures becoming sparser and smaller to rear, but gradually denser to both sides. Scutellum subcordate, sparsely and finely punctate. Elytra distinctly punctate-striate, the punctures in striae large, intervals nearly flat, sparsely and finely punctate with several transverse wrinkles, lateral margins visible only at humeri in dorsal view; elytra relatively short, about 2 times as long as pronotum. Propleuron minutely and longitudinally wrinkled but separated by fine punctures. Posternum densely punctate, with dense and short hair, posternal process smoothly descended at apex. Protibia slender, not strongly widened to apex, inner border emarginate at base, with 2 rows of sparse short hair, protibia produced to inner and front apex; outer border linearly truncate at basal half, and bearing 8 or 9 weak undulant teeth at apical half; dorsal surface relatively smooth, with sparse and fine punctures; ventral surface with a row of 4 or 5 sharp teeth, and sparsely hairy. Mesotibia coarse, densely and sharply dentate at outer border. Metatibia smooth at outer border, relative length of 1<sup>st</sup> to 4<sup>th</sup> segment of metatarsus from base to apex: 37.0, 13.0, 12.0, 26.0, basal segment much longer than terminal segment. Aedeagus linearly truncate at apex in dorsal view, broadly and longitudinally grooved in ventral view, and slightly curved in lateral view; parameres broad at base, slightly narrowed to apex, and



Figs 9 16. *Uloma quadratithoraca* sp. nov. 9. Antenna. 10. Mentum. 11. Pronotum. 12. Protibia. 13. Metatarsus. 14. Apical aedeagus in dorsal view. 15. Apical aedeagus in ventral view. 16. Aedeagus in lateral view.



Figs 17-18. Two new species of the genus *Uloma* Dejean, 1821. 17. *U. compressa* sp. nov., ♂. 18. *U. quadratithoraca* sp. nov. ♂.

then broadened again, with a semicircular depression at apex.

Female. Unknown.

Body length 10.0 mm, width 4.5 mm.

Holotype ♂, Dajiangkou, Xupu County (27.92°N, 110.57°E), Hunan Province, Apr. 1962, collected by ZHENG Ai Guo.

Diagnosis. The new species can be distinguished from *U. gongshanica* Ren et Liu, 2004 by the following characters: body median in size, reddish brown; antennae with very long, oval terminal segment, sharp at apex; maxillary palpus with slender and subknife shaped terminal segment; pronotum quadrate; prosternal process smoothly descended at apex.

Etymology. The specific name is derived from the Latin word “*quadratus*” (quadrate) + “*thorax*” (thorax), and with combination of the feminine suffix “-a”, which refers to quadrate pronotum.

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## REFERENCES

- Gebien, H. 1913. H. Sauter's Formosa Ausbeute. Tenebrionidae (Coleopt.). *Arch. für Naturg.*, 79, A9: 24, figs. 6-7.  
Gebien, H. 1939. Katalog Der Tenebrioniden. 579-584.  
Kaszab, Z. 1941. Tenebrioniden aus Formosa (Cd.). *Settiner Entomologische Zeitung*, 102: 55.  
Masumoto, K. and Nishikawa, N. 1986. A revisional study of the species of the genus *Ulama* from Japan, Korea and Taiwan (Tenebrionidae, Coleoptera). *Insecta Matsumurana*, 35: 28-30, figs. 39-43, 48-52.  
Ren, G D and Liu, S S 2004. Six new species of the genus *Ulama* from Gadigong Mountain in China (Coleoptera, Tenebrionidae). *Acta Zootaxonomica Sinica*, 29 (2): 296-304. [动物分类学报]  
Liu, S S, Ren, G D and Wang, J S 2007. Three new species of the genus *Ulama* Dejean, 1821 from Wuyi Mountain in China with a new record (Coleoptera, Tenebrionidae, Uomini). *Acta Zootaxonomica Sinica*, 32 (1): 70-75. [动物分类学报]  
Liu, S S and Ren, G D 2007. Taxonomic study of the genus *Ulama* Dejean from Guangxi in China (Coleoptera, Tenebrionidae, Uomini). *Acta Zootaxonomica Sinica*, 32 (3): 530-538. [动物分类学报]

## 中国齿甲属两新种记述 (鞘翅目, 拟步甲科, 齿甲族)

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**摘要** 记述了中国齿甲属 *Ulama* Dejean 2 新种, 即扁平齿甲 *U. compressa* sp. nov. 和方胸齿甲 *U. quadratithorax* sp. nov.。模式标本保存在河北大学博物馆。

**1 扁平齿甲, 新种 *Ulama compressa* sp. nov.** (图 1~8, 17)

新种与眼脊齿甲 *U. nanshanchia* Masumoto et Nishikawa, 1986 相似, 主要区别: 眼内侧无横脊; 触角较长, 达到前胸背板基部1/2处; 前胸腹板中间有少许短毛; 鞘翅行间扁平; 后足第1跗节明显长于末节。正模 ♂, 云南景东景屏利月 (1630 m), 2001.11.16, 童正强采。副模1 ♂, 张家界, 1986.07, 采集者不详。

词源: 种名由拉丁词 *compressus* (扁压的, 直的) 变化词

**关键词** 鞘翅目, 拟步甲科, 齿甲属, 新种, 中国。

中图分类号 Q969.498.2

尾而来, 意指该虫身体扁平。

**2 方胸齿甲, 新种 *Ulama quadratithorax* sp. nov.** (图 9~16, 18)

新种与贡山齿甲 *U. gongshanica* Ren et Liu, 2004 相似, 主要区别: 体中等大小, 红棕色; 触角末节很长, 卵形, 端部尖; 下颚须末节细长, 近刀状; 前胸背板方形; 前胸腹板突末端缓慢下降。正模 ♂, 湖南省溆浦县大江口, 1962.04, 邓爱国采。

词源: 种名由拉丁语词 *quadratus* (成方形的) + 拉丁语词 *thorax* (胸部) 组合并变化词尾而成, 意指该虫的前胸背板为方形。